

# Comparisons of Job Characteristics

**Focus Occupation:** [Automotive Service Technicians and Mechanics \(49-3023\)](#)

**Associated Occupation:** [Aircraft Mechanics and Service Technicians \(49-3011\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 87

**Focus Occupation:** Automotive Service Technicians and Mechanics (49-3023)

**Associated Occupation:** Aircraft Mechanics and Service Technicians (49-3011)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mechanical	6.8	22.8	20.8	0	Current knowledge level may be sufficient
Design	5.2	13.5	7.5	<<	Extensive education and/or training may be required
Engineering and Technology	5.7	12.3	12.9	0	Current knowledge level may be sufficient
Physics	4.3	10.9	8.6	<	Expanded education and/or training may be required
Chemistry	4.8	10.6	6.4	<<	Extensive education and/or training may be required
Transportation	4.6	9.8	6.2	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 90

**Focus Occupation:** Automotive Service Technicians and Mechanics (49-3023)

**Associated Occupation:** Aircraft Mechanics and Service Technicians (49-3011)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Equipment Maintenance	3.5	17.2	11.6	<<	Extensive development of skills in this area may be required
Repairing	3.4	15.9	12.7	<<	Extensive development of skills in this area may be required
Troubleshooting	4.5	13.9	11.4	<	A higher skill level may be required
Operation Monitoring	6.6	13.5	10.9	<	A higher skill level may be required
Quality Control Analysis	5.9	12.8	10.4	<	A higher skill level may be required
Equipment Selection	3.3	9.1	9.4	0	Current skill level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 87			
Focus Occupation: Automotive Service Technicians and Mechanics (49-3023) Associated Occupation: Aircraft Mechanics and Service Technicians (49-3011)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Finger Dexterity	7.6	14.8	12.6	<	Some improvement in abilities may be required
Control Precision	6.6	14.4	13.5	0	Current ability level may be sufficient
Problem Sensitivity	11.1	14.4	12.0	<	Some improvement in abilities may be required
Manual Dexterity	6.5	13.9	12.4	<	Some improvement in abilities may be required
Information Ordering	9.9	12.8	10.5	<	Some improvement in abilities may be required
Arm-Hand Steadiness	6.8	12.2	12.2	0	Current ability level may be sufficient
Flexibility of Closure	7.8	11.1	9.3	<	Some improvement in abilities may be required
Perceptual Speed	7.4	10.7	8.4	<	Some improvement in abilities may be required
Visual Color Discrimination	6.4	10.7	8.9	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 93
<b>Focus Occupation: Automotive Service Technicians and Mechanics (49-3023)</b> <b>Associated Occupation: Aircraft Mechanics and Service Technicians (49-3011)</b>		
Work Activities	Exclusivity of Activity	
Adhere to safety procedures	12	
Align or adjust clearances of mechanical components or parts	72	
Align or adjust clearances of vehicle body parts or components	78	
Align vehicle frame	87	
Apply filler substances to dents in vehicle bodies	92	
Assemble, dismantle, or reassemble equipment or machinery	70	
Conduct tests to locate mechanical system malfunction	71	
Determine installation, service, or repair needed	58	
Diagnose malfunctioning vehicle systems	85	
Diagnose mechanical problems in machinery or equipment	65	
Fabricate, assemble, or disassemble manufactured products by hand	11	

Follow vehicle repair procedures	85
Identify base metals for welding	68
Identify properties of metals for repair or fabrication activities	71
Inspect machinery or equipment to determine adjustments or repairs needed	42
Lubricate machinery, equipment, or parts	59
Maintain or repair cargo or passenger vehicle	69
Maintain welding machines or equipment	70
Move or fit heavy objects	8
Operate hoist, winch, or hydraulic boom	34
Operate lathes	76
Operate vehicle engine electrical system test equipment	84
Overhaul vehicle major operating units, such as engines or transmissions	84
Perform safety inspections in industrial, manufacturing or repair setting	32
Read schematics	34
Read technical drawings	7
Read vehicle manufacturer's specifications	76
Read work order, instructions, formulas, or processing charts	9
Repair commercial transportation equipment	85
Repair or replace electrical wiring, circuits, fixtures, or equipment	49
Repair or replace malfunctioning or worn mechanical components	62
Repair vehicle body parts	92
Set up and operate variety of machine tools	62
Test electrical/electronic wiring, equipment, systems or fixtures	54
Test mechanical products or equipment	56
Understand service or repair manuals	40
Understand technical operating, service or repair manuals	6
Use acetylene welding/cutting torch	54
Use auto or vehicular body repair equipment	89
Use electrical or electronic test devices or equipment	40
Use electronic calibration devices	68
Use engine diagnostic equipment	82
Use hand or power tools	2
Use knowledge of metric system	39
Use knowledge of welding filler rod types	75
Use lifting equipment in vehicle repair setting	87
Use machine tools in installation, maintenance, or repair	72
Use pneumatic tools	66
Use precision measuring devices in mechanical repair work	61
Use soldering equipment	44
Use voltmeter, ammeter, or ohmmeter	52
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 86

**Focus Occupation: Automotive Service Technicians and Mechanics (49-3023)**  
**Associated Occupation: Aircraft Mechanics and Service Technicians (49-3011)**

Tools and Technologies	Exclusivity
Business function specific software	1
Compressors	9
Computer data input devices	2
Computer printers	2
Computers	1
Cutting and crimping and punching tools	3
Data management and query software	1
Electrical measuring and testing equipment	7
Fastener setting tools	12
Finance accounting and enterprise resource planning ERP software	2
Forming tools	2
Hearing protectors	12
Holding and clamping tools	3
Indicating and recording instruments	2
Industrial trucks	10
Industry specific software	1
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Machine tools	7
Marking tools	11
Measuring and layout tools	3
Metals and metallurgy and structural materials testing instruments	15
Non destructive examination equipment	13
Paint applicators and painting accessories	15
Pneumatic tools	8
Power tools	2
Pressure measuring and control instruments	10
Rough and finishing tools	5
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Temperature and heat measuring instruments	6
Tool attachments and accessories	12
Viewing and observing instruments and accessories	4
Vision protection and accessories	3
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.